

REMARKS

Below, the applicant's comments are preceded by related remarks of the examiner set forth in small bold font.

1. Claims 1-4, 10-13 and 23-24 are rejected under 35 U. S. C. 102(e) as being anticipated by Shoemake (U. S. Pub. No. 2002/0105925).

Referring to claim 1, a method comprising, monitoring a variable rate data communication channel to determine its signal to noise ratio (paragraph [0004], figures 6B, 6C, 7B and 7C), and adjusting the data transmission rate of the variable rate data transmission channel based on its signal to noise ratio (paragraphs [0035], [0038], [0042], [0044], [0045], and figures 6B, 7B and 8).

The applicant disagrees, as amended claim 1 includes "monitoring a variable-rate data communication channel during a non-transmission period to determine its signal-to-noise ratio."

Shoemake teaches that "upon transmit from AP 210 to STA 220, the SNR of the transmission is of interest. STA 220 may transmit this information to AP 210, or AP 210 may calculate an estimate of SNR 330a when STA 220 transmits to AP 210. The same is true for SINR 330b" (paragraph 33, lines 1-7). Shoemake's system monitors the signal-to-noise ratio during a period of transmission and does not teach or suggest "monitoring a variable-rate data communication channel during a non-transmission period" as in claim 1.

**Referring to claims 2 and 11...
Referring to claims 3 and 12...
Referring to claims 4 and 13...
Referring to claim 24...**

Claims 2-4, 11-13 and 24 are patentable for at least the same reasons as the claims on which they depend.

**Referring to claim 10...
Referring to claim 23...**

Claims 10 and 23 each include the limitation of monitoring a variable-rate data communication channel during a non-transmission period to determine its signal-to-noise ratio and are patentable for at least the same reasons as claim 1.

2. Claims 25 -27 are rejected under 35 U. S. C. 102(e) as being anticipated by Jalali (U. S. Pub No. 2003/0095506).

Referring to claim 25, a data communication rate control system comprising, first computing device including a first wireless communication system (figure 3, number 110a), a second computing device including a second wireless communication system (figure 3, number 150a), wherein first and second wireless communication systems form a variable rate data communication channel between first and second computing devices (figure 1 A, numbers 110, 112, 150 and 166, figure 3, number 1 10a, 150, 330, 342, 370 and 378, figures 4 and 5 and paragraph [0028]), that each wireless communication system includes a SNR determination process for monitoring variable-rate data communication channel to determine its signal-to-noise ratio (paragraphs [0026], [0045]-[0098], and [0113], and figures 1A, 2, 3, 4 and 5 and claims 1, 8, 9, 13, 19, 20 and 3 l), and a transmission rate adjustment process, responsive to SNR determination process, for adjusting the data transmission rate of variable rate data communication channel based on its signal-to-noise ratio (figure 2, numbers 220, 222, 224, figure 3, numbers 340, 330 see the solid arrow line from 340 to 330 for the transmitter side, numbers 378 and 380 see the dashed arrow line from 378 to 370 for the receiver side, figure 4, number 418, figure 5, number 370, and paragraphs [0025]-[0028], [0075], [0097]-[0098], and claims 13, 17, 18, and 27).

As amended, claim 25 includes “a SNR determination process for monitoring said variable-rate data communication channel during a non-transmission period to determine its signal-to-noise ratio.” Jalali teaches a system that includes a channel estimator that “processes the recovered OFDM symbols to provide estimates of one or more characteristics of the communication channel, such as the channel frequency response, the channel noise variance, the signal-to-noise-and-interference ratio (SNR) of the received symbols, and so on” (paragraph 25, lines 10-15). The OFDM signals are determined based on the modulation symbols, and the modulation symbols are determined based on “feedback information received from a receiver 150” (paragraph 22, lines 5-6). Jalali does not teach “a SNR determination process for monitoring said variable-rate data communication channel during a non-transmission period to determine its signal-to-noise ratio.”

Referring to claim 26...
Referring to claim 27...

Claims 26 and 27 are patentable for at least the same reasons as claim 25.

3. Claims 5-9, 14-22, and 28-30 are objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claims 5-8 and 14-22, the applied references fail to disclose or render, obvious the claimed limitations that determining a noise signal strength factor for the received side of variable communication data communication channel during a non-transmission period, as specified in the claim.

Referring to claims 9 and 28-30 the applied reference fail to disclose or render, obvious the claimed limitations that iteratively adjusting the data transmission rate of the variable rate data communication channel if the signal to noise ratio of the channel can not be determined for a defined period of time as specified in the claim.

The applicant acknowledges the allowance of claims. Based on the comments of the examiner, the applicant has added new independent claims 31 and 32 which capture features that the applicant believes the examiner will find patentable.

The fact that the applicant has addressed certain comments of the examiner does not mean that the applicant concedes any other positions of the examiner. The fact that the applicant has asserted certain grounds for the patentability of a claim does not mean that there are not other good grounds for patentability of that claim or other claims. The fact that the applicant has amended a claim does not mean that the applicant conceded the examiner's position with respect to that claim.

Enclosed is a \$190 check for excess claim fees. Please apply any other charges to deposit account 06-1050, referencing Attorney Docket No. 10559-740001.

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Respectfully submitted,

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